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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,290	02/28/2002	Toshio Kazama	AB-1215 US	3057
33605 7590 12/17/2008 MACPHERSON KWOK CHEN & HEID LLP 2033 GATEWAY PLACE SUITE 400 SAN JOSE, CA 95110				
EXAMINER TSUKERMAN, LARISA Z				
ART UNIT 2833		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/070,290

## Applicant(s)

KAZAMA, TOSHIO

## Examiner

LARISA Z. TSUKERMAN

## Art Unit

2833

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/21/2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-7, 9, 10 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable by Chang (5500605) in view of Onodera et al. (6133537).

**In regard to claims 1, 9 and 10**, Chang discloses a conductive contact member 25 for establishing a temporary electric contact by being applied under a resilient force (member 22 and spring 24 and spring 30), to an object 10 to be contacted, that includes solid solder 15.

However, Chang lacks a layer of highly electrically conductive material resistant to solder deposition wherein the layer consists of gold containing a small amount of silver, the layer being formed at least over a conductive contact part of the conductive contact

member so that the conductive contact part of the conductive contact member may not be contaminated by deposition of solder from the object to be contacted.

As noted in the Board Decision of Sept. 25, 2008 (p. 11), Onodera et al. teach not only a contact 110/120 with a contact surface comprising an Au/Ag/Pd alloy layer to provide a contact surface with a high anti - adhesion property and a highly stable contact resistance to (see Abstract, Col.4, lines 35-65), but alternatively one of the first and second contact surfaces comprises an Au/Ag alloy (see Col.3 Lines 30-40), whereby a high anti-adhesion property and a highly stable contact resistance can be obtained particularly when the electric contacts are in non-operating state.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made and for the same reason to use Au/Ag(Pd)/or Au/Ag alloy, as taught by Onodera et al., in the structure of Chang.

**In regard to claim 4**, Chang modified by Onodera et al. discloses most of the claimed invention except for that silver is added to gold by 0.01 to 8%.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add silver to gold in such range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

**In regard to claim 5**, Chang discloses the conductive contact member is selected from the group consisting of a needle member 26 having a pointed end 29 (see Fig. 3 and 4).

**In regard to claim 6**, Chang modified by Onodera et al. discloses most of the claimed invention except for that the conductive member made of steel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the conductive member made of steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416 (CCPA 1960).

**In regard to claim 7**, Chang discloses the contact member 25/30 in a form of a compression coil spring (see Fig.3).

**In regard to claims 11 -13**, Chang discloses an amount of silver added to gold is between 0.01% and 5% (see Col.4, lines 38-42).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (5500605) and Onodera et al. (6133537), as applied to claim 1 above, and further in view of DiRenzo (3599326).

**In regard to claim 2**, Chang modified by Onodera includes most of the limitations except for how the layer was formed. DiRenzo teaches pins 12 have a layer resistant to solder deposition formed by plating.

Various coating methods can be used: dipping, silk screening or application of a past, thermosonic and thermocompression bonding etching, plating, sputtering, vacuum evaporation, gluing, conductive ink and pasting methods may be used.

Plating method includes various well know, widely spread, and low cost methods such as: electrolytic plating, hot tinning, electro tinning, electrolyses plating, cream solder potting method, etc. Therefore, it would have been obvious to one having ordinary skill

in the art at the time the invention was made to use a low cost and well – known method of plaiting, as taught by DiRenzo, in Chang-Onodera structure.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made and for the same reason to use Au Ag (Pd) alloy, as taught by Onodera et al., in structure of Chang.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (5500605) in view of Onodera et al. (6133537), as applied to claims 1 and 7 above, and further in view of Loranger et al. (5791914).

**In regard to claim 8**, Chung as modified by Onodera et al. disclosed most of the claimed invention, including the solder resistant layer is formed over an outer surface, except for the contact member having a contact part in a form of closely wound turns of a coil wire. Loranger et al. discloses the contact member 11 is in a form of a compression coil spring having contact rigid ends 29/23 in a form of closely wound turns of a coil wire (see Fig.5). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made and to include a contact part in a form of closely wound turns of a coil wire in structure of Chang, as taught by Loranger, in order to provide an axially straight electric path all the time for better electrical connection.

### ***Response to Arguments***

Applicant's arguments filed 11/21/2008 have been fully considered but they are not persuasive and are fully answered above or in the Decision of 09/20/2008.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARISA Z. TSUKERMAN whose telephone number is (571)272-2015. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee S Luebke can be reached on (571)-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LT,12/08/2008

*/renee s luebke/*

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